IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

E.I. DU PONT DE NEMOURS AND COMPANY,)	
Plaintiff,)	
v.)	C.A. No. 11-773 (SLR) (CJB)
HERAEUS PRECIOUS METALS NORTH AMERICA CONSHOHOCKEN LLC,)	
Defendant.)	

ANSWER, AFFIRMATIVE DEFENSES AND COUNTERCLAIMS OF DEFENDANT HERAEUS PRECIOUS METALS NORTH AMERICA CONSHOHOCKEN LLC

Defendant Heraeus Precious Metals North America Conshohocken LLC ("Heraeus"), by and through undersigned counsel, files this Answer to the First Amended Complaint for Patent Infringement ("Amended Complaint") of E.I. du Pont de Nemours and Company ("DuPont") as follows. The numbered paragraphs below correspond to the numbered paragraphs in the Amended Complaint.

NATURE OF THE ACTION

- 1. Heraeus admits that the Amended Complaint purports to be an action arising under the patent laws of the United States, including 35 U.S.C. § 271 and §§ 281-285.
- 2. Heraeus admits that the Amended Complaint alleges infringement of U.S. Patent Number 7,767,254 ("'254 Patent"), entitled "Paste for Solar Cell Electrode and Solar Cell."

PARTIES

3. Heraeus admits, on information and belief, that DuPont is a corporation organized and existing under the laws of the state of Delaware, with a principal place of business located at 1007 Market Street, Wilmington, Delaware 19898. Heraeus is without knowledge or

information sufficient to form a belief as to the truth of the remaining allegations of paragraph 3 and therefore denies the same.

4. Heraeus admits that it is a limited liability company organized under the laws of Delaware, with a principal place of business at 24 Union Hill Road, West Conshohocken, Pennsylvania 19248. Heraeus denies the remaining allegations of Paragraph 4.

JURISDICTION AND VENUE

- 5. Heraeus admits that the Amended Complaint purports to file an action arising under the patent laws of the United States, including 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 271. Heraeus admits that this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) inasmuch as the Amended Complaint purports to state claims for patent infringement arising under the patent laws of the United States.
- 6. Paragraph 6 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus states that it does not contest personal jurisdiction by this Court for the purposes of this action only.
- 7. Heraeus does not contest that venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 and § 1400(b).

FACTUAL BACKGROUND

8. Paragraph 8 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus admits that the '254 Patent lists on its face that: DuPont is the assignee; the inventors are Takuya Konno, Takashi Kitagaki and Hiroki Kojo; the application for the '254 Patent was filed on August 26, 2009; and the '254 Patent issued on August 3, 2010. Heraeus admits that Exhibit A of the Amended Complaint contains what purports to be a copy of the '254 Patent. Heraeus is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations and therefore denies the same.

9. Paragraph 9 contains legal conclusions for which no answer is required. Heraeus admits that the preamble of claim 1 of the '254 Patent states "a method of producing a light-receiving surface electrode of a solar cell," and that claim 1 recites a conductive paste comprised of, among other things, "silver particles with a specific surface of 0.20-0.60 m²g," "glass frit," and "resin binder." Heraeus is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations and therefore denies the same.

COUNT I – INFRINGEMENT OF UNITED STATES PATENT NO. 7,767,254

- 10. Heraeus restates its answers to Paragraphs 1-9.
- 11. Paragraph 11 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus denies all remaining allegations of paragraph 11.
- 12. Paragraph 12 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus denies all remaining allegations of paragraph 12.
- 13. Paragraph 13 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus denies all remaining allegations of paragraph 13.

RESPONSE TO COUNT II – INDIRECT INFRINGEMENT OF UNITED STATES PATENT NO. 7,767,254

- 14. Heraeus restates its answers to Paragraphs 1-13.
- 15. Paragraph 15 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus admits that it was aware of the '254 Patent as of September 2, 2011, when this lawsuit was filed.
- 16. Paragraph 16 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus denies all remaining allegations of paragraph 16.
- 17. Paragraph 17 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus denies all remaining allegations of paragraph 17.

- 18. Paragraph 18 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus denies all remaining allegations of paragraph 18.
- 19. Paragraph 19 contains legal conclusions to which no answer is required. To the extent that an answer is required, Heraeus denies all remaining allegations of paragraph 19.

RESPONSE TO THE PRAYER FOR RELIEF

The "Wherefore" paragraph and the paragraphs numbered "a" to "h" in the Amended Complaint state DuPont's Prayer for Relief, to which no answer is required. To the extent that an answer is required, Heraeus denies the allegations in the Amended Complaint's Prayer for Relief and denies that DuPont is entitled to any relief.

GENERAL DENIAL

Heraeus denies each and every allegation in the Amended Complaint to which Heraeus has not specifically responded and expressly admitted.

DEFENSES First Defense

Heraeus is not infringing, and has not infringed, either literally or under the doctrine of equivalents, any valid and enforceable claim of the '254 Patent.

Second Defense

The asserted claims of the '254 Patent are invalid for failure to comply with the requirements of 35 U.S.C. § 1 *et seq.*, including §§ 101, 102, 103 and/or 112.

Third Defense

Plaintiff's claims are barred, in whole or in part, by the doctrines of waiver, laches and/or estoppel, including, but not limited to estoppel based on representations to the USPTO during prosecution of the '254 patent.

RESERVATION OF ADDITIONAL DEFENSES

20. Heraeus presently has insufficient knowledge or information upon which to form a belief as to whether it may have additional, yet unstated, defenses. As such, Heraeus reserves the right to assert additional affirmative defenses in the event discovery indicates that additional affirmative defenses are appropriate, including, but not limited to, the defense of patent misuse.

COUNTERCLAIMS

Defendant Heraeus Precious Metals North America Conshohocken LLC ("Heraeus"), for its Counterclaims against Plaintiff, E.I. du Pont de Nemours and Company ("DuPont"), alleges:

NATURE OF THE ACTION

1. This is an action arising under the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202, and under the United States Patent Act, 35 U.S.C. § 101, *et seq*. Heraeus requests a judicial declaration that (1) it does not infringe any claims of U.S. Patent Number 7,767,254 ("254 Patent") and/or (2) the '254 Patent is invalid.

THE PARTIES

- 2. Heraeus is a corporation organized and existing under the laws of Delaware, with a principal place of business at 24 Union Hill Road, West Conshohocken, Pennsylvania 19248.
- 3. On information and belief, DuPont is a corporation organized and existing under the laws of the state of Delaware, with a principal place of business located at 1007 Market Street, Wilmington, Delaware 19898.

JURISDICTION AND VENUE

- 4. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 1338, 2201 and 2202.
- 5. This Court has personal jurisdiction over DuPont for at least the reason that DuPont has submitted itself to the jurisdiction of this Court by filing the Amended Complaint.
- 6. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b) and (c) and 1400(b) for these Counterclaims in that DuPont has filed suit in this judicial district on the patent that is the subject of these Counterclaims.

THE CONTROVERSY

COUNT I

Declaratory Judgment of Non-Infringement of the '254 Patent

- 7. Heraeus repeats the allegations of Paragraphs 1-8 of these Counterclaims as if fully set forth herein.
- 8. DuPont alleges that it is the owner by assignment of U.S. Patent 7,767,254 ("'254 Patent").
- 9. Heraeus is not infringing, and has not infringed, either literally or under the doctrine of equivalents, any valid and enforceable claim of the '254 Patent.
- 10. DuPont has filed an Amended Complaint against Heraeus in this case that alleges Heraeus infringes the '254 Patent. As a result, there is an immediate, real and continuing justiciable controversy between Heraeus and DuPont regarding infringement or non-infringement of the '254 Patent.
- 11. Heraeus respectfully asks this Court to enter a declaratory judgment declaring that Heraeus is not infringing, and has not infringed, either literally or under the doctrine of

equivalents, directly, indirectly, by inducement or contributorily, any valid and enforceable claim of the '254 Patent.

COUNT II Declaratory Judgment of Invalidity of the '254 Patent

- 12. Heraeus repeats the allegations of Paragraphs 1-13 of these Counterclaims as if fully set forth herein.
- 13. DuPont alleges that it is the owner by assignment of U.S. Patent 7,767,254 ("'254 Patent").
- 14. The claims of the '254 Patent are invalid for failure to satisfy one or more requirements of 35 U.S.C. § 1 et seq., including §§ 102, 103 and/or 112. On information and belief, the claims are anticipated by prior art methods of applying a conductive paste on a silicon substrate and then firing the paste, where the paste comprises silver particles having a specific surface of 0.20-0.60 m²/g, glass frit, resin binder, and thinner, including prior art methods of making front side solar cell electrodes. On information and belief, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine prior art references that disclose one or more elements of the claimed method, including: a conductive silver paste applied on a silicon substrate, a conductive paste comprising silver particles with a specific surface of 0.20-0.60 m²/g, glass frit, resin binder, and thinner; and firing the applied conductive paste. On information and belief, it was known in the art to form front side solar cell electrodes by applying a conductive paste on a silicon substrate and then firing the paste, where the paste comprises silver particles, glass frit, resin binder, and thinner. On information and belief, it was known in the art to form conductors by applying a conductive paste on a substrate and then firing the paste, where the paste comprises silver particles with a specific surface of 0.20-0.60 m²/g, glass frit, resin binder, and thinner, and it would have been obvious to one of ordinary skill in the

art to utilize such a methods for forming a front side solar cell electrode on a silicon substrate. The anticipatory and obviousness prior art includes patents and publications that were published or filed before the effective date of the '254 patent under 35 U.S.C. § 102(a), (b) and/or (e) and methods, conductive pastes and silver powders that were known, in public use, on sale and/or invented by others before the effective date of the 254 patent under 35 U.S.C. § 102(a), (b) and/or (g)(2). On information and belief, one or more limitations of the '254 patent claims fails to satisfy the requirements of 35 U.S.C. § 112, including, without limitation, one or more of the following limitations are indefinite, lack written description, and/or are not adequately enabled by the specification: "wherein the conductive paste comprises silver particles with a specific surface of 0.20-0.60 m²/g" (claim 1); "wherein firing temperature is 600-900 degree C. in the firing step" (claim 2); "wherein firing time is 2-15 minutes in the firing step" (claim 3); "wherein the specific surface of the silver particles is 0.25-0.50 m²/g" (claim 5); "wherein the average particle diameter of the silver particles is 0.1-14 µm" (claim 6); wherein the average particle diameter of the silver particles is 2.0 µm" (claim 7); "the content of the silver particles in the paste is 70-90 wt % upon the weight of the paste" (claim 8); "wherein the content of the glass frit is 0.5-10 wt % based upon the weight of the paste" (claim 9).

- 15. DuPont has filed an Amended Complaint against Heraeus in this case that alleges Heraeus infringes the '254 Patent. As a result, there is an immediate, real and continuing justiciable controversy between Heraeus and DuPont regarding the validity of the '254 Patent.
- 16. Heraeus respectfully asks this Court to enter a declaratory judgment declaring that the claims of the '254 Patent are invalid.

JURY DEMAND

Heraeus respectfully demands a trial by jury of any and all issues triable of right by jury in this action.

RELIEF

WHEREFORE, Heraeus prays for judgment with respect to DuPont's Amended Complaint and its Counterclaims that this Court:

- Enter judgment against DuPont and in favor of Heraeus on all counts set forth in the Amended Complaint by DuPont;
- Find that DuPont takes nothing by its Amended Complaint and that DuPont's
 Complaint be dismissed in its entirety with prejudice;
- c. Find that this is an exception case and award Heraeus its attorney fees pursuant to 35 U.S.C. § 285 or otherwise;
- d. Enter declaratory judgment in favor of Heraeus that:
 - Heraeus is not infringing, and has not infringed, either literally or under the doctrine of equivalents, any valid and enforceable claim of the '254 Patent; and/or
 - ii. The claims of the '254 Patent are invalid.
- e. Award Heraeus all of its costs and expenses in this action;
- f. Award Heraeus its attorney's fees, including prejudgment interest on such fees;
- g. Award Heraeus pre-judgment interest;
- h. Deny any injunctive relief sought by DuPont;
- i. Grant Heraeus such further and other relief as the Court may deem just and proper.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

/s/Paul Saindon

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August 26, 2013

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CERTIFICATE OF SERVICE

I hereby certify that on August 26, 2013, I caused the foregoing to be electronically filed with the Clerk of the Court using CM/ECF, which will send notification of such filing to all registered participants.

I further certify that I caused copies of the foregoing document to be served on August 26, 2013, upon the following in the manner indicated:

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